

Abstract of the Disclosure

A computerized method for mixing inks to facilitate high fidelity color reproduction for printing includes the steps of using a theoretical printer model to establish relationship between the colorant space and the color space using the small number of measurements; building a simplified colorant space wherein each color in the color space corresponds to only one colorant point; sampling the color space for accurate calibration; performing interpolation and correction for any non-calibrated points based on the theoretical and experimental results; and building a color reproduction table that accepts image data as input and output colorant combinations for use by the printer to achieve high fidelity color printing.